

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 146 (DULANEY VALLEY ROAD) AT THE TOWSON TOWN CENTER SOUTH ENTRANCE IN BALTIMORE COUNTY. APS AND COUNTDOWN SIGNAL HEADS TO BE INSTALLED ON THE EAST AND NORTH PEDESTRIAN CROSSINGS.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA 4 PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE LEFT TURN PHASE FOR THE SOUTHBOUND MOVEMENT OF MD 146 (DULANEY VALLEY ROAD) AND A RIGHT TURN OVERLAP FOR THE WESTBOUND MOVEMENT OF THE TOWSON TOWN CENTER SOUTH ENTRANCE. THE THROUGH MOVEMENTS OPERATE CONCURRENTLY. A NEW ACTUATED AUDIBLE PEDESTRIAN MOVEMENT ACROSS THE EAST LEG OF THE INTERSECTION WILL BE ADDED. THE TOWSON TOWN CENTER SOUTH ENTRANCE WESTBOUND MOVEMENT OPERATES ALONE, WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE NORTH LEG OF THE INTERSECTION.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MS. ERIN KUHN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2810
MR. DONALD SCHAEFER, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 321-2821
MR. STEVEN MARCISZEWSKI, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761
MR. MICHAEL PASQUARIELLO, UTILITY ENGINEER
PHONE: (410) 321-2841
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. EDWARD RODENWIZER, SUPERVISOR, SIGNAL OPERATIONS
PHONE: (410) 787-7652

2. APS WILL FUNCTION AS FOLLOWS:

FOR MD 146 (DULANEY VALLEY ROAD)

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS DULANEY VALLEY".
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR ENTRANCE

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS ENTRANCE".
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

3. THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER.

EQUIPMENT LIST

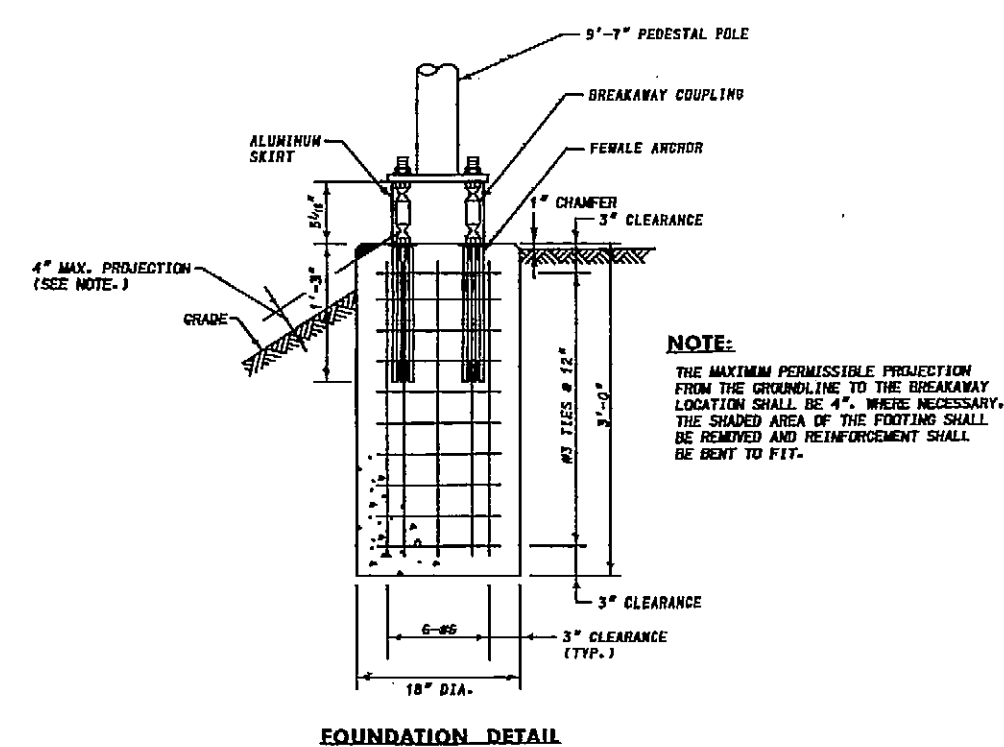
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

NONE.

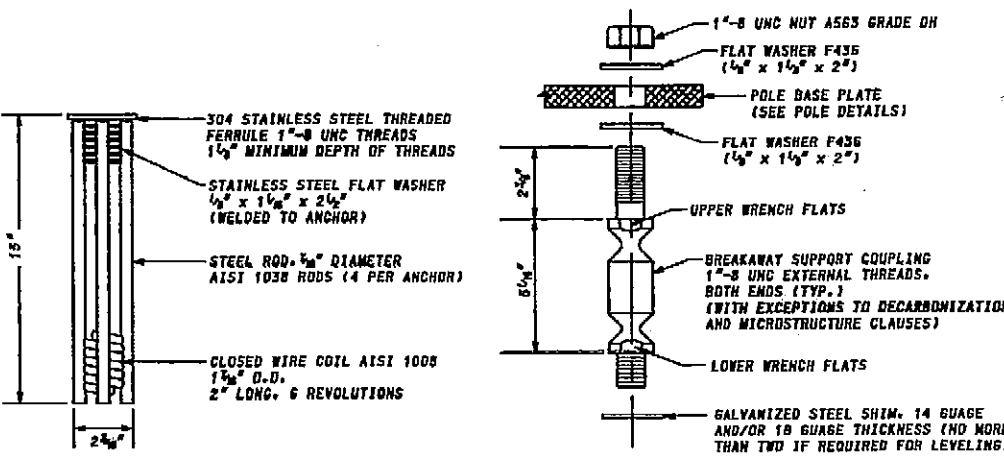
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
1	EA	PUSHBUTTON PEDESTRIAN POLE PER MD STANDARD NO. 801.01-01.
3	EA	10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE
4	EA	AUDIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY WITH PUSHBUTTON SIGN
1	EA	APS 2-WIRE CENTRAL CONTROL UNIT
4	EA	16 IN. 1-SECTION, 1-WAY LED (COUNTDOWN) PEDESTRIAN SIGNAL HEAD - POST TOP
4	CY	TEST PIT EXCAVATION
400	LF	2-CONDUCTOR CABLE (NO. 14 AWG)
400	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
45	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
35	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
10	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - PUSHED
1	EA	INSTALL 2 IN. CONDUIT BEND INTO EXISTING SIGNAL POLE BASE
4	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
1	LS	REMOVE EXISTING SIGNAL EQUIPMENT

DETAIL



FOUNDATION DETAIL



FEMALE ANCHOR DETAIL

BREAKAWAY COUPLING DETAIL

SPECIFICATION CATEGORY CODE ITEMS

818

APPROVED

DEPUTY CHIEF ENGINEER - TRAFFIC DATE

APPROVAL: SHA
REVISION: 6-17-07
APPROVAL: FEDERAL HIGHWAY ADMINISTRATION
REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

REVISION: 6-17-07

Maryland Department of Transportation

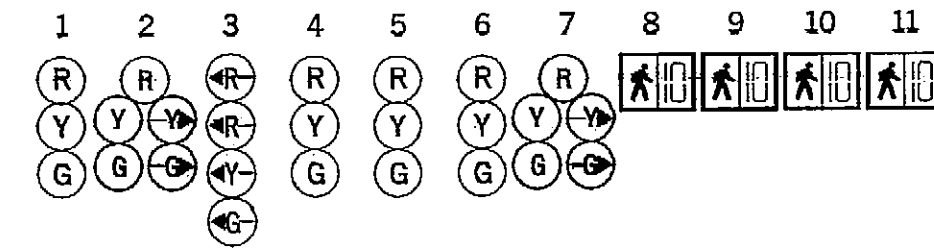
STATE HIGHWAY ADMINISTRATION

STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES

SIGNAL STRUCTURE FOUNDATIONS FOR
PUSHBUTTON AND PEDESTRIAN SIGNAL POLE

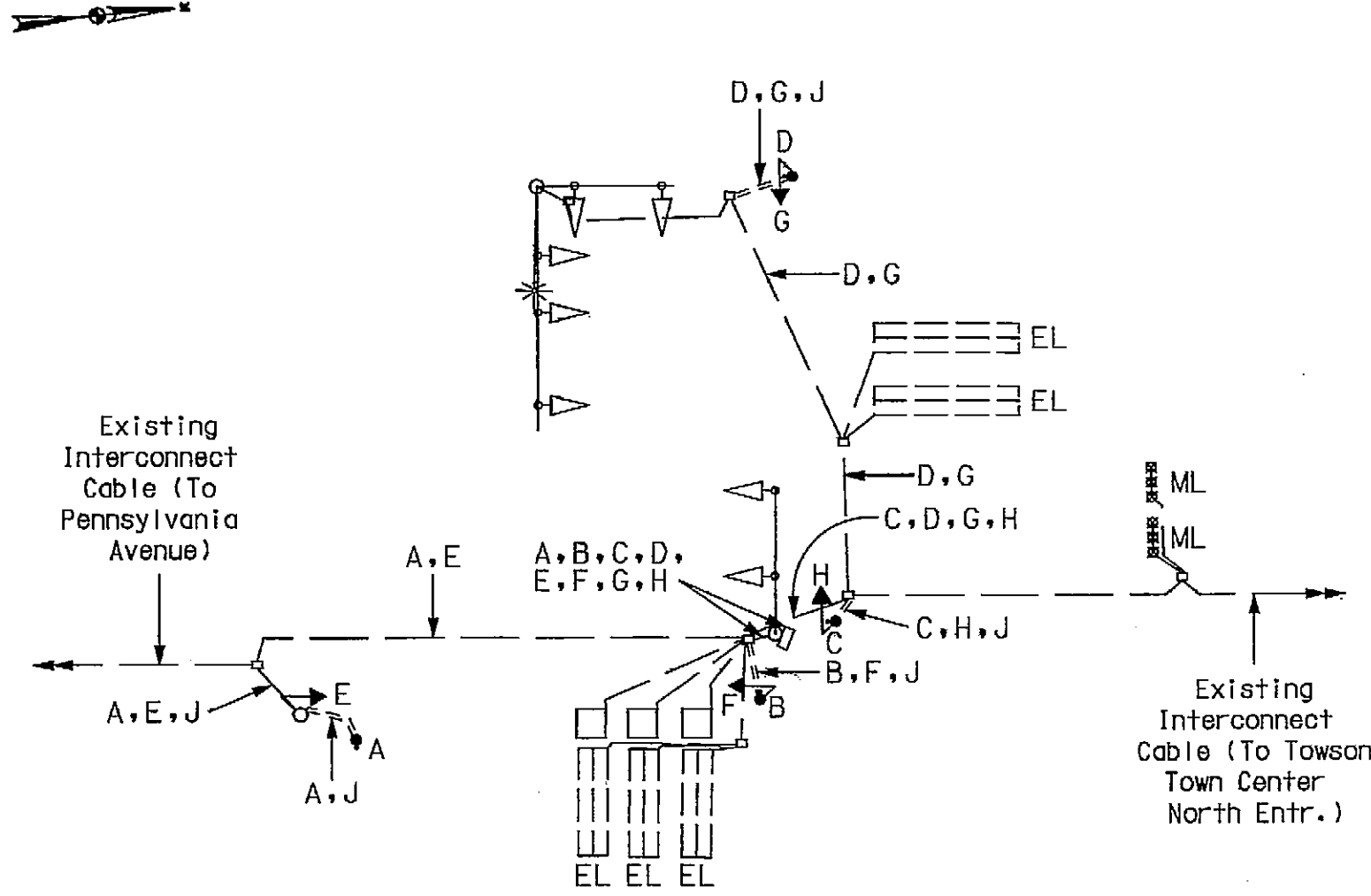
STANDARD NO. MD 801.01-01

PHASE CHART



PHASE 1	R	R	+G-	R	R	R	-G+	DW	DW	DW	DW
1 CHANGE TO 1 AND 6, OR 2 AND 6											
PHASE 1 AND 6	R	R	+G-	G	G	R	-G+	DW	DW	DW	DW
1 AND 6 CHANGE	R	R	+G-	G	G	R	-G+	DW	DW	DW	DW
PHASE 2 AND 6	G	G	+R-	G	G	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	+R-	G	G	R	R	FLDW	FLDW	DW	DW
2 AND 6 CHANGE	Y	Y	+R-	Y	Y	R	R	DW	DW	DW	DW
PHASE 8	R	R	+R-	R	R	G	G	DW	DW	DW	DW
8 CHANGE	R	R	+R-	R	R	G	G	DW	DW	DW	DW
PHASE 8 ALT	R	R	+R-	R	R	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	+R-	R	R	G	G	DW	DW	FLDW	FLDW
8 ALT CHANGE	R	R	+R-	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK
PRE EMPTION	G	G	+R-	G	G	R	R	WK	WK	DARK	DARK

WIRING DIAGRAM



- A } 2-CONDUCTOR ELECTRICAL
B } CABLE (NO. 14 A.W.G.)
C }
D }
E - EXISTING 3-CONDUCTOR ELECTRICAL
CABLE (NO. 14 A.W.G.)
F } 5-CONDUCTOR ELECTRICAL
G } CABLE (NO. 14 A.W.G.)
H }
J - BARE COPPER GROUND
WIRE (NO. 6 A.W.G.)
EL - EXISTING LOOP DETECTOR WIRE
ML - EXISTING MICRO-LOOP DETECTOR

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 146 (DULANEY VALLEY ROAD) @
TOWSON TOWN CENTER SOUTH ENTRANCE

GENERAL INFORMATION PLAN

SCALE NA DATE OCTOBER 15, 2008 CONTRACT NO. BW596M82

DESIGNED BY F. BROWNLEY COUNTY BALTIMORE

DRAWN BY F. BROWNLEY LOGMILE 03014600.19

CHECKED BY TIMS NO. 1533

FAP NO. N/A TOD NO.

TS NO. 3570D-GI DRAWING - OF SHEET NO. 2 OF 2

PLOTTED: Tuesday, January 18, 2009 AT 03:50 PM
FILE: F:\0007\0007-0000\0007-Traffic_Signals\0007-MD146-Mall South Entrance.dgn